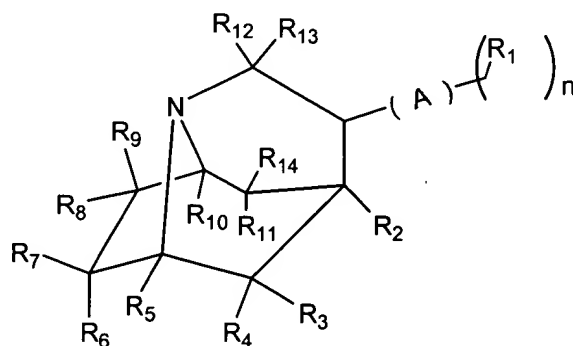


In the claims

1. **(Currently amended)** A compound represented by formula **(I)**:



(I)

wherein,

A is either a double bond or a single bond, n is 2 or 3, and each occurrence of R₁ is independently selected from the group consisting of hydrogen, aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkenyl, and alkynyl;

R₂-R₁₃ each independently are selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkoxy, acyl, -C(O)R₈, amino, hydroxy, thio, halogen, cyano, nitro, trifluoromethyl, ~~azide~~ -N₃, imino -C(R₈)=NR₈, -N=C(R₈)₂, amide -C(O)N(R₈)₂, phosphoryl -Q₂-P(Q₁)(OR₈)₂, sulfonyl -SO₂R, silyl group, ether -R₉OR₈, alkylthio -SR₈, and carbonyl -CO₂R₈;

R₁₄ is selected from the group consisting of ester -R₉C(O)OR, -OC(O)R, O-R₁₅, wherein R₁₅ is selected from the group consisting of alkyl, cycloalkyl, aryl, heteroaryl, alkenyl, and alkynyl; ketone -R₉(O)CR₈; oxime -C(R₈)=N(OH); carboxylic acid; aldehyde -R₉C(O)H; phosphoryl -Q₂-P(Q₁)(OR₈)₂; and silyl;

R₈ represents independently for each occurrence hydrogen, alkyl, alkenyl, alkynyl, or aryl;

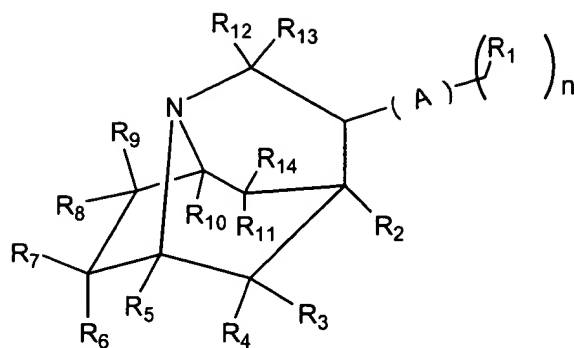
R₉ represents independently for each occurrence a bond or an alkyl, alkenyl, alkynyl, or aryl biradical;

Q₁ represents independently for each occurrence S or O; and

Q₂ represents independently for each occurrence O, S, or NR₈.

or a pharmaceutically acceptable salt thereof.

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2. **(Currently amended)** The compound of claim 1, wherein one occurrence of R₁ is selected from the group consisting of aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkenyl, and alkynyl; A is a double bond; n = 2; at least one occurrence of R₁ is hydrogen, and the compound is an E (entgegen) or Z (zusammen) isomer; R₂-R₁₃ each independently represent hydrogen or alkyl; and R₁₄ is ~~an ester~~ -R₉C(O)OR or -OC(O)R.
 3. **(Previously amended)** The compound of claim 1, wherein one occurrence of R₁ is selected from the group consisting of haloaryl, alkoxy, alkylaryl, polycyclyl, alkenylaryl, and alkynylaryl; and either one or two occurrences of R₁ represent hydrogen.
 4. **(Previously amended)** The compound of claim 1, wherein A is a double bond; n = 2; and one occurrence of R₁ is selected from the group consisting of phenyl, 3,4-Dichloro-phenyl, 4-methoxy-phenyl, 4-fluoro-phenyl, 1-naphthyl, 2-furyl, 3-furyl, methoxy, and substituted or unsubstituted alkenylaryl, and the second occurrence of R₁ is hydrogen, and the compound is an E (entgegen) isomer.
 5. **(Currently amended)** The compound of claim 1, wherein one occurrence of R₁ is 4-methoxy-phenyl, one occurrence of R₁ is hydrogen; R₂-R₁₃ each represent hydrogen; and R₁₄ represents ~~an ester~~ -R₉C(O)OR or -OC(O)R.
 6. **(Currently amended)** The compound of claim 1, wherein one occurrence of R₁ is phenyl, one occurrence of R₁ is hydrogen, R₂-R₁₃ each represent hydrogen, and R₁₄ represents ~~an ester~~ -R₉C(O)OR or -OC(O)R.
 7. **(Currently amended)** A pharmaceutical composition comprising a compound of formula (I):



(I)

wherein,

A is either a double bond or a single bond, n is 2 or 3, and each occurrence of R_1 is independently selected from the group consisting of hydrogen, aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkenyl, and alkynyl;

R_2 - R_{13} each independently are selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkoxy, acyl, ~~-C(O) R_8~~ , amino, hydroxy, thio, halogen, cyano, nitro, trifluoromethyl, ~~azide~~ $-N_3$, ~~imino~~ $-C(R_8)=NR_8$; $-N=C(R_8)_2$, ~~amido~~ $-C(O)N(R_8)_2$, ~~phosphoryl~~ $-Q_2-P(Q_1)(OR_8)_2$, ~~sulfonyl~~ $-SO_2R$, silyl group, ether $-R_9OR_8$, alkylthio $-SR_8$, and carbonyl $-CO_2R_8$;

R_{14} is selected from the group consisting of ~~ester~~ $-R_9C(O)OR$, $-OC(O)R$, $O-R_{15}$, wherein R_{15} is selected from the group consisting of alkyl, cycloalkyl, aryl, heteroaryl, alkenyl, and alkynyl; ~~ketone~~ $-R_9(O)CR_8$; ~~oxime~~ $-C(R_8)=N(OH)$; carboxylic acid; ~~aldehyde~~ $-R_9C(O)H$; ~~phosphoryl~~ $-Q_2-P(Q_1)(OR_8)_2$; and silyl;

R_8 represents independently for each occurrence hydrogen, alkyl, alkenyl, alkynyl, or aryl;

R_9 represents independently for each occurrence a bond or an alkyl, alkenyl, alkynyl, or aryl biradical;

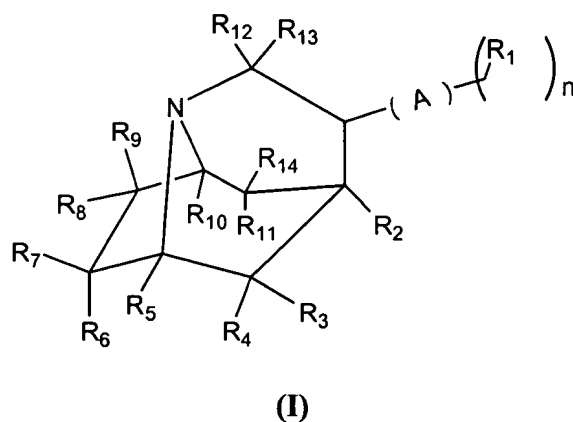
Q_1 represents independently for each occurrence S or O; and

Q_2 represents independently for each occurrence O, S, or NR_8 ;

or a pharmaceutically acceptable salt thereof; and

a pharmaceutically acceptable carrier.

8. **(Currently amended)** The pharmaceutical composition of claim 7, wherein one occurrence of R_1 is selected from the group consisting of aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkenyl, and alkynyl; A is a double bond; $n = 2$; at least one occurrence of R_1 is hydrogen, and the compound is an E (entgegen) or Z (zusammen) isomer; and R_2 - R_{13} each independently represent hydrogen or alkyl; and R_{14} is ~~an ester~~ $-R_9C(O)OR$ or $-OC(O)R$.
9. **(Previously amended)** The pharmaceutical composition of claim 7, wherein one occurrence of R_1 is selected from the group consisting of haloaryl, alkoxy, alkylaryl, polycyclyl, alkenylaryl, and alkynylaryl; and one or two occurrences of R_1 represent hydrogen.
10. **(Previously amended)** The pharmaceutical composition of claim 7, wherein A is a double bond; $n = 2$; and one occurrence of R_1 is selected from the group consisting of phenyl, 3,4-Dichloro-phenyl, 4-methoxy-phenyl, 4-fluoro-phenyl, 1-naphthyl, 2-furyl, 3-furyl, methoxy, and substituted or unsubstituted alkenylaryl, and the second occurrence of R_1 is hydrogen, and the compound is an E (entgegen) isomer.
11. **(Currently amended)** A method for treating a disorder caused by a deficiency in monoamine concentration in a human comprising administering a therapeutically effective dose of a compound of formula (I):



wherein,

A is either a double bond or a single bond, n is 2 or 3, and each occurrence of R₁ is independently selected from the group consisting of hydrogen, aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkenyl, and alkynyl;

R₂-R₁₃ each independently are selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkoxy, ~~acyl~~ -C(O)R₈, amino, hydroxy, thio, halogen, cyano, nitro, trifluoromethyl, ~~azide~~ -N₃, ~~imino~~ -C(R₈)=NR₈; -N=C(R₈)₂, ~~amido~~ -C(O)N(R₈)₂, ~~phosphoryl~~ -Q₂-P(Q₁)(OR₈)₂, ~~sulfonyl~~ -SO₂R, silyl group, ether -R₉OR₈, alkylthio -SR₈, and carbonyl -CO₂R₈;

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R₁₄ is selected from the group consisting of ~~ester~~ -R₉C(O)OR, -OC(O)R, O-R₁₅, wherein R₁₅ is selected from the group consisting of alkyl, cycloalkyl, aryl, heteroaryl, alkenyl, and alkynyl; ~~ketone~~ -R₉(O)CR₈; ~~oxime~~ -C(R₈)=N(OH); carboxylic acid; ~~aldehyde~~ -R₉C(O)H; ~~phosphoryl~~ -Q₂-P(Q₁)(OR₈)₂; and silyl;

R₈ represents independently for each occurrence hydrogen, alkyl, alkenyl, alkynyl, or aryl;

R₉ represents independently for each occurrence a bond or an alkyl, alkenyl, alkynyl, or aryl biradical;

Q₁ represents independently for each occurrence S or O; and

Q₂ represents independently for each occurrence O, S, or NR₈;

or a pharmaceutically acceptable salt thereof.

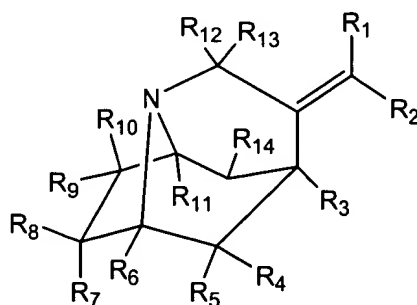
12. **(Currently amended)** The method of claim 11, wherein one occurrence of R₁ is selected from the group consisting of aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkenyl, and alkynyl; A is a double bond; n = 2; at least one occurrence of R₁ is hydrogen, and the compound is an E (entgegen) or Z (zusammen) isomer; and R₂-R₁₃ each independently represent hydrogen or alkyl; and R₁₄ is ~~an ester~~ -R₉C(O)OR or -OC(O)R.

13. **(Previously amended)** The method of claim 11, wherein one occurrence of R₁ is selected from the group consisting of haloaryl, alkoxy, alkylaryl, polycyclic, alkenylaryl, and alkynylaryl; and one or two occurrences of R₁ represent hydrogen.

14. **(Previously amended)** The method of claim 11, wherein A is a double bond; $n = 2$; and one occurrence of R_1 is selected from the group consisting of phenyl, 3,4-Dichloro-phenyl, 4-methoxy-phenyl, 4-fluoro-phenyl, 1-naphthyl, 2-furyl, 3-furyl, methoxy, and substituted or unsubstituted alkenylaryl, and the second occurrence of R_1 is hydrogen, and the compound is an E (entgegen) isomer.
15. **(Previously amended)** The method of claim 11, wherein said disorder in a human is associated with a deficiency in the concentration of serotonin or norepinephrine.
16. **(Previously amended)** The method of claim 11, wherein said disorder in a human is selected from the group consisting of depression, substance addiction, neurodegenerative disease, Attention Deficit Disorder, Huntington's Disease, and bipolar disorder.
17. **(Previously amended)** The method of claim 16, wherein said disorder in a human is Parkinson's Disease or Alzheimer's Disease.
18. **(Previously amended)** The method of claim 16, wherein said substance addiction is cocaine addiction.

Claims 19-26. **(Cancelled)**

27. **(Currently amended)** A compound represented by formula (II):



(II)

wherein,

R_1 and R_2 each independently are selected from the group consisting of hydrogen, aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkenyl, and alkynyl;

R₃-R₁₃ each independently are selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkoxy, ~~acyl~~ -C(O)R₈, amino, hydroxy, thio, halogen, cyano, nitro, trifluoromethyl, ~~azide~~ -N₃, ~~imino~~ -C(R₈)=NR₈; -N=C(R₈)₂, ~~amido~~ -C(O)N(R₈)₂, ~~phosphoryl~~ -Q₂-P(Q₁)(OR₈)₂, ~~sulfonyl~~ -SO₂R, silyl group, ether -R₉OR₈, alkylthio -SR₈, and carbonyl -CO₂R₈;

R₁₄ is selected from the group consisting of ester -R₉C(O)OR, -OC(O)R, O-R₁₅, wherein R₁₅ is selected from the group consisting of alkyl, cycloalkyl, aryl, heteroaryl, alkenyl, and alkynyl; ~~ketone~~ -R₉(O)CR₈; ~~oxime~~ -C(R₈)=N(OH); carboxylic acid; ~~aldehyde~~ -R₉C(O)H; ~~phosphoryl~~ -Q₂-P(Q₁)(OR₈)₂; and silyl;

R₈ represents independently for each occurrence hydrogen, alkyl, alkenyl, alkynyl, or aryl;

R₉ represents independently for each occurrence a bond or an alkyl, alkenyl, alkynyl, or aryl biradical;

Q₁ represents independently for each occurrence S or O; and

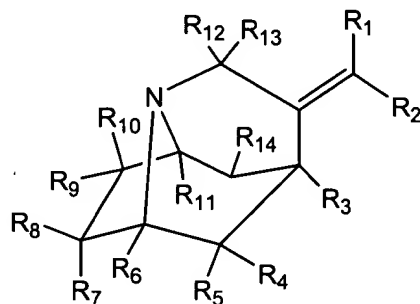
Q₂ represents independently for each occurrence O, S, or NR₈;

or a pharmaceutically acceptable salt thereof.

28. **(Currently amended)** The compound of claim 27, wherein R₁ is selected from the group consisting of aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkenyl, and alkynyl, and R₂ is hydrogen, or R₂ is selected from the group consisting of aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkenyl, and alkynyl, and R₁ is hydrogen, and the compound is an E (entgegen) or Z (zusammen) isomer; R₃-R₁₃ each independently represent hydrogen or alkyl; and R₁₄ is ~~an ester~~ -R₉C(O)OR or -OC(O)R.

29. **(Previously amended)** The compound of claim 27, wherein R₁ is selected from the group consisting of haloaryl, alkoxy, alkylaryl, polycyclyl, alkenylaryl, and alkynylaryl; and R₂ is hydrogen; or R₂ is selected from the group consisting of haloaryl, alkoxy, alkylaryl, polycyclyl, alkenylaryl, and alkynylaryl; and R₁ is hydrogen.

30. (**Previously amended**) The compound of claim 27, wherein R_1 is selected from the group consisting of phenyl, 3,4-Dichloro-phenyl, 4-methoxy-phenyl, 4-fluoro-phenyl, 1-naphthyl, 2-furyl, 3-furyl, methoxy, and substituted or unsubstituted alkenylaryl; and R_2 is hydrogen, and the compound is an E (entgegen) isomer.
31. (**Currently amended**) The compound of claim 27, wherein R_1 is 4-methoxy-phenyl, R_2 is hydrogen, R_3 - R_{13} each represent hydrogen, and R_{14} is ~~an ester~~ $-R_9C(O)OR$ or $-OC(O)R$.
32. (**Currently amended**) The compound of claim 27, wherein R_1 is phenyl, R_2 is hydrogen, R_3 - R_{13} each represent hydrogen, and R_{14} is ~~an ester~~ $-R_9C(O)OR$ or $-OC(O)R$.
33. (**Currently amended**) A pharmaceutical composition comprising a compound of formula (II):



(II)

wherein,

- R_1 and R_2 each independently are selected from the group consisting of hydrogen, aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkenyl, and alkynyl;
- R_3 - R_{13} each independently are selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkoxy, ~~acyl~~ $-C(O)R_8$, amino, hydroxy, thio, halogen, cyano, nitro, trifluoromethyl, ~~azido~~ $-N_3$, ~~imine~~ $-C(R_8)=NR_8$; $-N=C(R_8)_2$, ~~amide~~ $-C(O)N(R_8)_2$, ~~phosphoryl~~ $-Q_2-P(Q_1)(OR_8)_2$, ~~sulfonyl~~ $-SO_2R$, silyl group, ~~ether~~ $-R_9OR_8$, ~~alkylthio~~ $-SR_8$, and ~~carbonyl~~ $-CO_2R_8$;

R₁₄ is selected from the group consisting of ester -R₉C(O)OR, -OC(O)R, O-R₁₅, wherein

R₁₅ is selected from the group consisting of alkyl, cycloalkyl, aryl, heteroaryl, alkenyl, and alkynyl; ~~ketone~~ -R₉(O)CR₈; ~~oxime~~ -C(R₈)=N(OH); carboxylic acid; aldehyde -R₉C(O)H; ~~phosphoryl~~ -O₂-P(Q₁)(OR₈)₂; and silyl;

R₈ represents independently for each occurrence hydrogen, alkyl, alkenyl, alkynyl, or aryl;

R₉ represents independently for each occurrence a bond or an alkyl, alkenyl, alkynyl, or aryl biradical;

Q₁ represents independently for each occurrence S or O; and

Q₂ represents independently for each occurrence O, S, or NR₈.

or a pharmaceutically acceptable salt thereof; and

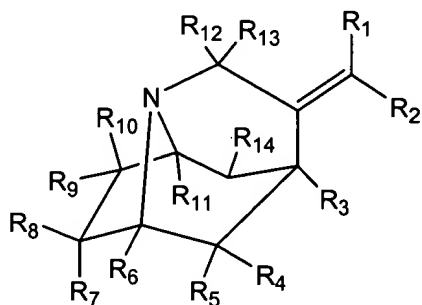
a pharmaceutically acceptable carrier.

62 34. **(Currently amended)** The pharmaceutical composition of claim 33, wherein R₁ is selected from the group consisting of aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkenyl, and alkynyl, and R₂ is hydrogen, or R₂ is selected from the group consisting of aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkenyl, and alkynyl, and R₁ is hydrogen, and the compound is an E (entgegen) or Z (zusammen) isomer; R₃-R₁₃ each independently represent hydrogen or alkyl; and R₁₄ is ~~an ester~~ -R₉C(O)OR or -OC(O)R.

35. **(Previously amended)** The pharmaceutical composition of claim 33, wherein R₁ is selected from the group consisting of haloaryl, alkoxy, alkylaryl, polycyclyl, alkenylaryl, and alkynylaryl; and R₂ is hydrogen; or R₂ is selected from the group consisting of haloaryl, alkoxy, alkylaryl, polycyclyl, alkenylaryl, and alkynylaryl; and R₁ is hydrogen.

36. **(Previously amended)** The pharmaceutical composition of claim 33, wherein R₁ is selected from the group consisting of phenyl, 3,4-Dichloro-phenyl, 4-methoxy-phenyl, 4-fluoro-phenyl, 1-naphthyl, 2-furyl, 3-furyl, methoxy, and substituted or unsubstituted alkenylaryl; and R₂ is hydrogen, and the compound is an E (entgegen) isomer.

37. (Currently amended) A method for treating a disorder caused by a deficiency in monoamine concentration in a human comprising administering a therapeutically effective dose of a compound of formula (II):



(II)

wherein,

R₁ and R₂ each independently are selected from the group consisting of hydrogen, aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkenyl, and alkynyl;

R₃-R₁₃ each independently are selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkoxy, acyl, -C(O)R₈, amino, hydroxy, thio, halogen, cyano, nitro, trifluoromethyl, ~~azide~~ -N₃, imino -C(R₈)=NR₈; -N=C(R₈)₂, amide -C(O)N(R₈)₂, phosphoryl -Q₂-P(Q₁)(OR₈)₂, sulfonyl -SO₂R, silyl group, ether -R₉OR₈, alkylthio -SR₈, and carbonyl -CO₂R₈;

R₁₄ is selected from the group consisting of ester -R₉C(O)OR, -OC(O)R, O-R₁₅, wherein R₁₅ is selected from the group consisting of alkyl, cycloalkyl, aryl, heteroaryl, alkenyl, and alkynyl; ketone -R₉(O)CR₈; oxime -C(R₈)=N(OH); carboxylic acid; aldehyde -R₉C(O)H; phosphoryl -Q₂-P(Q₁)(OR₈)₂; and silyl;

R₈ represents independently for each occurrence hydrogen, alkyl, alkenyl, alkynyl, or aryl;

R₉ represents independently for each occurrence a bond or an alkyl, alkenyl, alkynyl, or aryl biradical;

Q₁ represents independently for each occurrence S or O; and

Q₂ represents independently for each occurrence O, S, or NR₈;

or a pharmaceutically acceptable salt thereof.

38. **(Currently amended)** The method of claim 37, wherein R_1 is selected from the group consisting of aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkenyl, and alkynyl, and R_2 is hydrogen, or R_2 is selected from the group consisting of aryl, heteroaryl, cycloalkyl, polycyclic, heterocyclic, alkenyl, and alkynyl, and R_1 is hydrogen, and the compound is an E (entgegen) or Z (zusammen) isomer; R_3 - R_{13} each independently represent hydrogen or alkyl; and R_{14} is ~~an ester~~ $R_9C(O)OR$ or $-OC(O)R$.
39. **(Previously amended)** The method of claim 37, wherein either R_1 is selected from the group consisting of haloaryl, alkoxy, alkylaryl, polycyclyl, alkenylaryl, and alkynylaryl; and R_2 is hydrogen; or R_2 is selected from the group consisting of haloaryl, alkoxy, alkylaryl, polycyclyl, alkenylaryl, and alkynylaryl; and R_1 is hydrogen.
40. **(Previously amended)** The method of claim 37, wherein R_1 is selected from the group consisting of phenyl, 3,4-Dichloro-phenyl, 4-methoxy-phenyl, 4-fluoro-phenyl, 1-naphthyl, 2-furyl, 3-furyl, methoxy, and substituted or unsubstituted alkenylaryl; and R_2 is hydrogen, and the compound is an E (entgegen) isomer.
41. **(Previously amended)** The method of claim 37, wherein said disorder in a human is associated with a deficiency in the concentration of serotonin or norepinephrine.
42. **(Previously amended)** The method of claim 37, wherein said disorder in a human is selected from the group consisting of depression, substance addiction, neurodegenerative disease, Attention Deficit Disorder, Huntington's Disease, and bipolar disorder.
43. **(Previously amended)** The method of claim 42, wherein said disorder in a human is Parkinson's Disease or Alzheimer's Disease.
44. **(Previously amended)** The method of claim 42, wherein said substance addiction is cocaine addiction.

Claims 45-59. **(Cancelled)**